## RECEIVED :908 901 0109 CENTRAL FAX CENTER

### 2 OCT 2.8 2011

USSN 12/217,672

Docket No.: 0092-18-CIP DIV

#### Amendments to the Specification:

Please replace the first page of the specification to thereby change the title in accordance with the recommendation of the Examiner.

# A METHOD OF MAKING SOFT MAGNETIC AMORPHOUS METAL ELECTROMECHANICAL COMPONENT

This application is a continuation-in part of U.S. Application Serial No. 10/763,728, filed January 23, 2004, which is a continuation-in-part of U.S. Application Serial No. 10/458,944, filed June 11, 2003 (now U.S. Patent \_\_\_\_\_\_).

#### BACKGROUND OF THE INVENTION

Multi-pole rotating electro-mechanical devices, such as motors, generators, re-gen motors, alternators, brakes and magnetic bearings are comprised of rotors and electro-mechanical components. AC motors rotate by producing a rotating magnetic field pattern in the electro-mechanical component that causes the rotor to follow the rotation of this field pattern. As the frequency varies, the speed of the rotor varies. To increase the speed of the motor, the frequency of the input source must be increased.

High frequency motors manufactured with the proper materials can be very efficient. For certain applications, like electric or hybrid cars, highly efficient electric motors are desirable.

The construction of electro-mechanical components for high frequency electric motors and generators is problematic. Iron or steel components are quite common in electric motors and generators.

However, at high frequencies, such as those greater than 400Hz, conventional iron or steel components are no longer practical. The high frequency of the AC source increases the core losses of the iron or steel components, reducing the overall efficiency of the motor. Additionally, at very high frequencies, the component may become extremely hot, cannot be cooled by any reasonably acceptable means and may cause motor failure.

For construction of electro-mechanical components used in high frequency electric motors, ribbon made from soft magnetic material provides distinct advantages.